

### **REMARKS/ARGUMENTS**

In this Amendment, Applicants have amended independent claim 1 to more-particularly claim the structure of Applicants' invention.

As now more-particularly claimed, with reference to Figures 1 and 2 of Applicants' application, the ceiling wall inlet mixing header 8 has first holes 21 and second holes 22 formed near ends of the bent L-shaped mixing header 8. The mixing header inlet connecting ducts 10 are connected to the first holes 21 and the mixing header outlet connecting ducts 9 are connected to the second holes 22. Due to the bent L-shape configuration of the ceiling wall inlet mixing header 8, the second end portion of the ceiling wall inlet mixing header 8 that includes second holes 22 is bent downward with respect to the first end portion of the ceiling wall inlet mixing header 8 that includes first holes 21. As will be further explained below, Applicants respectfully submit that this structure of Applicants' invention, along with other claimed structural features that will also be discussed below, provides for a beneficial flow of fluid in the ceiling wall inlet mixing header 8.

To assist the Examiner's understanding of the structure of Applicants' claimed ceiling wall inlet mixing header 8, and the effect that this claimed structure has on fluid flow within the ceiling wall inlet mixing header 8, an explanation of the claimed structure, and resulting flow of fluid within this structure, is provided with reference to the attached annotated version of Figure 2 of Applicants' application.

With Applicants' claimed structure, firstly, fluids A1-A3, which have different temperatures T1-T3, respectively, are introduced from mixing header inlet connecting ducts 10 through first holes 21 into the ceiling wall inlet mixing header 8. Since the first holes 21 are formed substantially on a same line along an axis of the ceiling wall inlet mixing header, as also claimed, the fluids A1-A3 are introduced substantially in the same level and join together as Fluid A as shown in the attached Figure. In this mixing region X, the first mixing of the fluids A1-A3 with different temperatures T1-T3 is performed.

Secondly with Applicants' claimed structure, the bent portion 23 provided halfway in the ceiling wall inlet mixing header 8 changes a flow of the Fluid A when it passes through the bent portion in mixing region Y, and this change of the flow causes a diffusion which improves upon the mixing X, discussed above. Thus, the bent portion 23 provides a second mixing of the fluid.

Thereafter, a third mixing Z occurs due to Applicants' claimed structure of the ceiling wall inlet mixing header 8. In the third mixing Z, the Fluid A falls down into the vertical pipe portion B and bounces off the bottom plate C which closes the open end of the ceiling wall inlet mixing header 8. Applicants respectfully submit that claim 1 claims that the second end portion is bent downward with respect to the first end portion of the ceiling wall inlet mixing header, and also, that claim 1 claims that the ends of the ceiling wall inlet mixing header are closed. Thus, in this section of Applicants' claimed structure, the bounced fluid (Fluid D) and the subsequent falling fluid (Fluid E) collide with each other, and the collision results to further improve the fluid mixing. Thus, this provides a third mixing of the fluid.

Therefore, Applicants respectfully submit that with Applicants' claimed structure, the ceiling wall inlet mixing header 8 provides a first mixing region X near the first holes 21 formed on a same line along an axis of the ceiling wall inlet mixing header, a second mixing region Y near the bent portion, and a third mixing region Z in the vertical pipe portion. Each of the mixing regions X, Y, and Z result from the different claimed structural characteristics of the ceiling wall inlet mixing header and, as a result of these claimed structural characteristics, the fluid mixing can be performed effectively and surely. As a result, the temperature of the fluid exiting from the ceiling wall inlet mixing header 8 through second holes 22 and into the mixing header outlet connecting ducts 9 can be uniform.

Applicants respectfully submit that JP '102 does not disclose or suggest Applicants' now even more-particularly claimed structure of the ceiling wall inlet mixing header of first holes substantially on a same line along an axis of the

ceiling wall inlet mixing header, second holes formed near a second end portion of the ceiling wall inlet mixing header, and a bent portion where the second end portion is bent downward with respect to the first end portion. Applicants respectfully submit that Applicants' invention is not merely an obvious changing of a straight tube to a bent tube, as argued by the Examiner, but rather, is a completely different structure than any interpreted ceiling wall inlet mixing header of JP '102. Applicants' claimed structure does not merely change a straight tube to a bent tube "to achieve the same function but in a more compact structure", but rather, is a structure that includes many distinguishing features over that disclosed in JP '102, and as such, is neither anticipated nor suggested by JP '102.

Further, Applicants respectfully submit that Applicants' specification provides evidence as to the advantageous effects that the totality of Applicants' claimed structure provides. Paras. 0033-0035 of Applicants' published patent application discusses the effects when Applicants' claimed ceiling wall inlet mixing header 8 is installed.

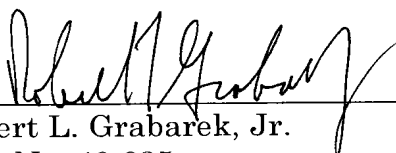
Since the present Office Action is a "Final" Action, Applicants are filing a Request for Continued Examination concurrently with the filing of this Amendment.

Applicants respectfully submit that the application is now in condition for allowance with independent claim 1 being allowable. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

As provided for above, this paper includes a Petition for an Extension of Time sufficient to effect a timely response. Please charge any deficiency in fees or credit any overpayment of fees to Deposit Account No. 05-1323 (Docket No. 101437.57334US).

Respectfully submitted,  
CROWELL & MORING LLP

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By   
Robert L. Grabarek, Jr.  
Reg. No. 40,625  
Tel.: (949) 263-8400 (Pacific Coast)

Attachment  
Intellectual Property Group  
P.O. Box 14300  
Washington, D.C. 20044-4300  
DC9381698.1